



# Semantic MediaWiki

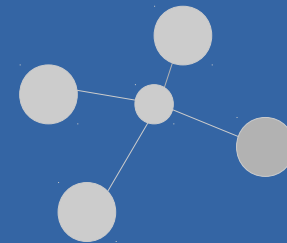
## Current Status

Karsten Hoffmeyer, September 26, 2019



### SMWCon 2019

September 25 to 26, Paris



# Semantic MediaWiki

- Current Status
- Semantic MediaWiki 3.1
- How you can contribute?

Current Status of <semantic-mediawiki.org>

### Extending and improving documentation

- Ongoing effort by a few community members
- Getting the missing documentation in  
[https://www.semantic-mediawiki.org/wiki/semantic-mediawiki.org:Documentation\\_status](https://www.semantic-mediawiki.org/wiki/semantic-mediawiki.org:Documentation_status)
- Less overwhelming in size and information
- More annotations, queries and templates for easier display and exploration
- Integration with the “Translate” extension for general information pages

Current Status of selected extensions to  
Semantic MediaWiki

### New extension

- Semantic Bundle
  - Allows for easy installation and invoking
  - Revival of the somewhat similar precursing bundle
  - Focus on semantic extensions only
  - Released earlier in September 2019

→ Source at <https://github.com/SemanticMediaWiki/SemanticBundle>

### New extension

- Semantic Approved Revs
  - Allows to semantically handle properties related to approval processes (by, date, revision and status)
  - Moves integration with of Approved Revs functionality out of Semantic Extra Special Properties
  - First release planned for October 2019

→ Source at <https://github.com/SemanticMediaWiki/SemanticApprovedRevs>

### Revived extension

- Semantic Tasks
  - Provides email notifications and reminders for semantically handled tasks
  - Extended by more properties for handling task processes
  - Modernized and refactored code
  - 2.0.0 release planned for October/November 2019

→ Source at <https://github.com/SemanticMediaWiki/SemanticTasks>



### Abandoned extension

- Semantic Comments
    - Allowed to display and manage comments semantically
    - Last supported Semantic MediaWiki 2.5.x
    - Replaced by the CommentStreams extension also providing integration with Semantic MediaWiki and even more goodness
- Source at <https://gerrit.wikimedia.org/g/mediawiki/extensions/CommentStreams>

### Other extensions

- Semantic Scribunto (2.1.0)
- Semantic Result Formats (3.1.0)
  - “spreadsheet” format added, replacing “excel” format
  - “gantt” format added
- Semantic Meta Tags (2.0.0)
- Semantic Glossary (3.0.0)

### Other extensions

- Semantic Interlanguage Links (2.0.0)
- Semantic Extra Special Properties (2.0.0)
  - New release 3.0.0 imminent → Semantic Approved Revs
- Semantic Compound Queries (2.1.0)
- Semantic Cite (2.1.0)
- Semantic Breadcrumb Links (2.0.0)

## Current Status of Semantic MediaWiki

### → Releases since SMWCon 2018

- SMW 3.0.x – 2 releases

3.0.0, 3.0.1, 3.0.2

- SMW 3.1.x – 1 release

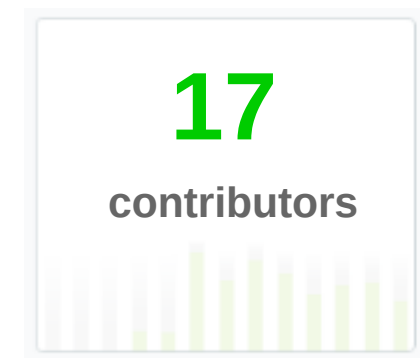
3.1.0

# Semantic MediaWiki

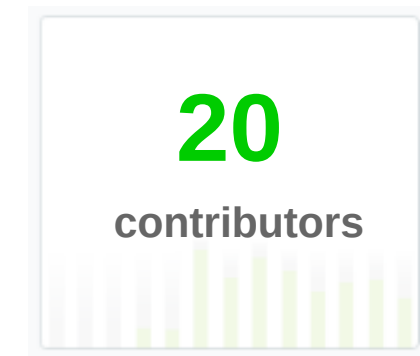
## Current Status

### GitHub Commits

July 2017 –  
June 2018



July 2018 –  
June 2019



Sources:

- <https://github.com/SemanticMediaWiki/SemanticMediaWiki>
- `git log 080c188c795a4cfccf87b97c497825c768ecb69...5c1fbd5687c9d1e16033e4e05d8daciaa0c3d6bd0 --pretty=oneline | wc -l`
- `git shortlog -sn 080c188c795a4cfccf87b97c497825c768ecb69...5c1fbd5687c9d1e16033e4e05d8daciaa0c3d6bd0`

# Semantic MediaWiki

## Current Status

### Integration Tests and Assertions

October 2018 –  
SMW 3.0.0

**6,808**

tests

**17,978**

assertions

September 2019 –  
SMW 3.1.0

**7,512**

tests

**20,041**

assertions

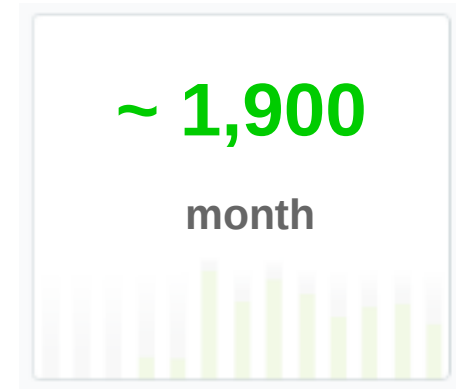
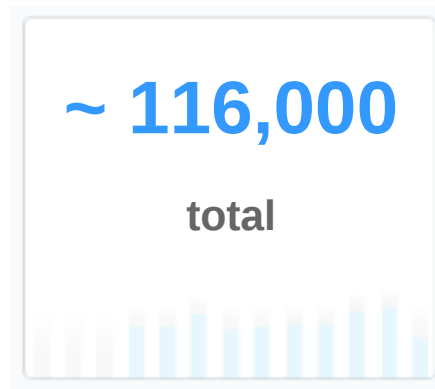
Source: <https://travis-ci.org/SemanticMediaWiki/SemanticMediaWiki>

# Semantic MediaWiki

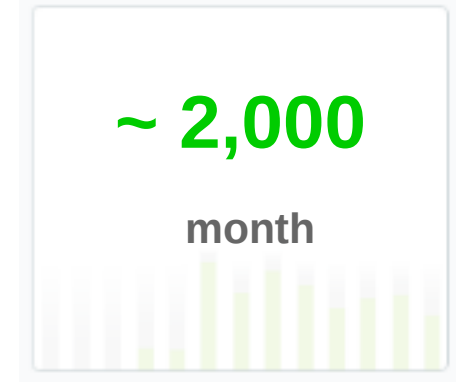
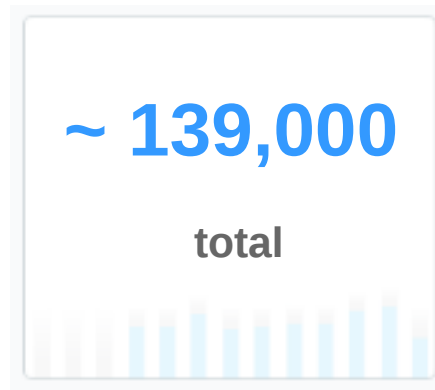
## Current Status

### Installation Processes

December 2018



September 2019



Source: <https://packagist.org/packages/mediawiki/semantic-media-wiki/stats> - Start in January 2014



# Semantic MediaWiki

## Current Status

### Installation Processes

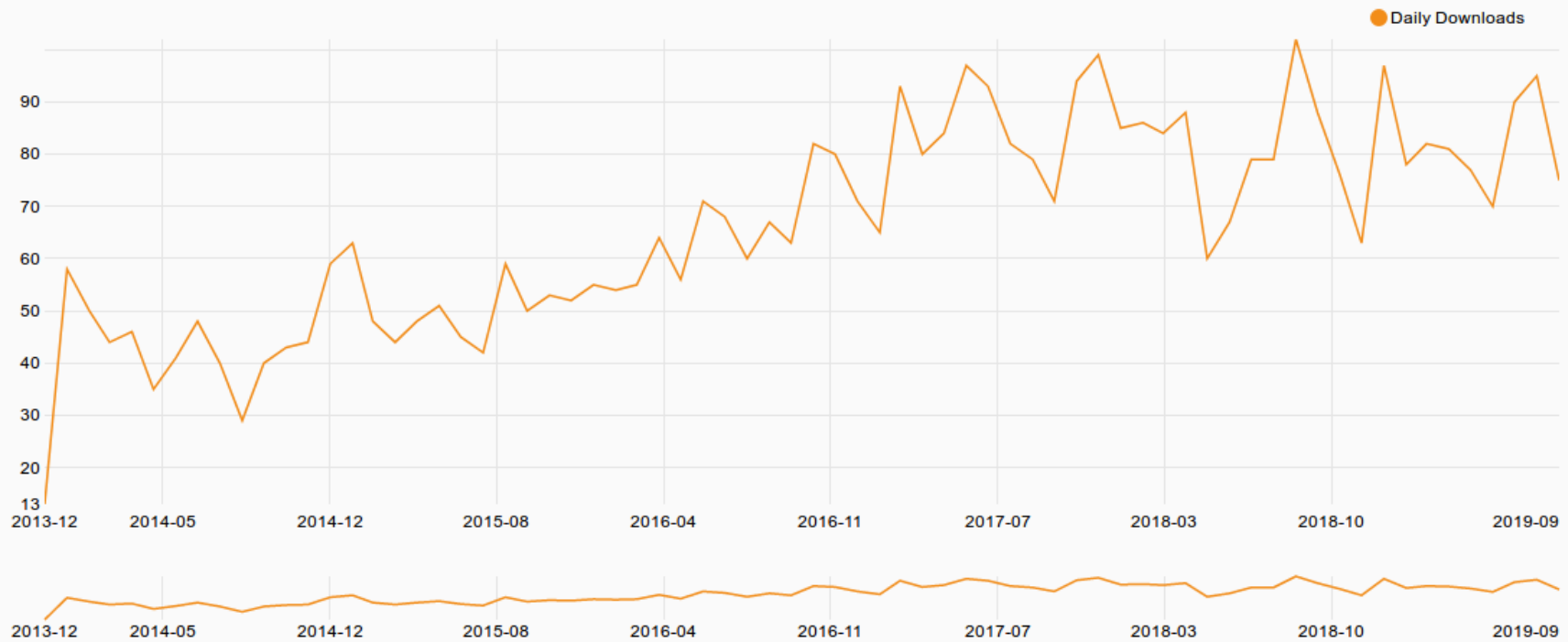
#### Installs

Overall 139 107

Last 30 days 2 167

Last 24h 29  
(rolling average, approx.)

#### Daily installs, averaged monthly



Source: <https://packagist.org/packages/mediawiki/semantic-media-wiki/stats>

# Semantic MediaWiki

Semantic MediaWiki 3.1.0

Released on September 23, 2019

# Semantic MediaWiki

Semantic MediaWiki 3.1.0

## GitHub Commits

October 2018 –  
September 2019

SMW 3.0.0 –  
SMW 3.1.0



Sources:

- <https://github.com/SemanticMediaWiki/SemanticMediaWiki>
- `git log abdec882fc57dd5b54cab15e8f419056164ee66a...0acc38fba2e13198f85060d08fbb055ec5452ec0 --pretty=oneline | wc -l`
- `git shortlog -sn abdec882fc57dd5b54cab15e8f419056164ee66a...0acc38fba2e13198f85060d08fbb055ec5452ec0`

### Tested Compatibility

- MediaWiki 1.31.x to MediaWiki 1.33.x
- PHP 7.0.x to PHP 7.3.x
- MySQL/MariaDB relational stores 5+
- Several RDF stores (Blazegraph 1.5.2+, etc.)
- Elasticsearch store 5.6+

# Semantic MediaWiki

## Semantic MediaWiki 3.0.0

### Code Coverage

✓ **master** Merge pull request #4295 from Wikia/mass-replace-legacy-  
Mass replace deprecated curly brace syntax for array  
offset access

➔ #13100 passed

🔄 Restart build

🕒 Commit 4561043

🔗 Compare 49e6c0e...4561043

🌿 Branch master

👤 Jeroen De Dauw

🕒 Ran for 25 min 19 sec

🕒 Total time 1 hr 51 min 37 sec

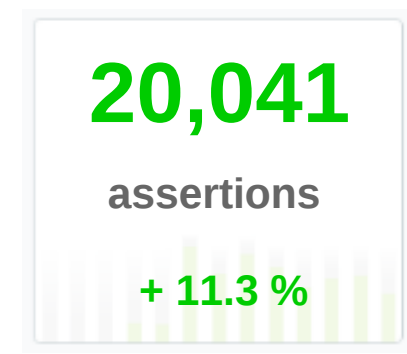
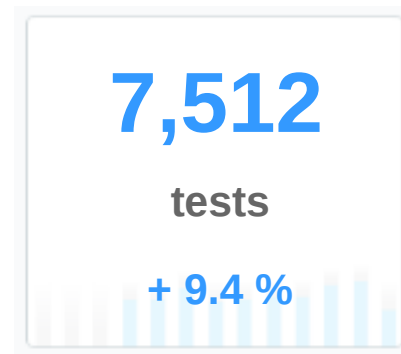
📅 3 days ago

Build jobs		View config	
✓ # 13100.1	👤 </> PHP: 7.1	📦 DB=mysql; MW=REL1_32; PHPUNIT=6.5.*	🕒 7 min
✓ # 13100.2	👤 </> PHP: 7.2	📦 DB=postgres; MW=REL1_31; PHPUNIT=6.5.*	🕒 6 min 40 sec
✓ # 13100.3	👤 </> PHP: 7.3	📦 DB=sqlite; MW=REL1_33; PHPUNIT=6.5.*	🕒 10 min 5 sec
✓ # 13100.4	👤 </> PHP: 7	📦 DB=sqlite; MW=REL1_31; SITELANG=ja; PHPUNIT=6.5.*	🕒 11 min 4 sec
✓ # 13100.5	👤 </> PHP: 7	📦 DB=mysql; MW=REL1_31; BLAZEGRAPH=1.5.2; PHPUNIT=6.5.*	🕒 14 min 8 sec
✓ # 13100.6	👤 </> PHP: 7.1	📦 DB=mysql; MW=REL1_32; FUSEKI=2.4.0; PHPUNIT=6.5.*	🕒 9 min 28 sec
✓ # 13100.7	👤 </> PHP: 7	📦 DB=mysql; MW=REL1_31; VIRTUOSO=6.1; PHPUNIT=6.5.*	🕒 8 min 12 sec
✓ # 13100.8	👤 </> PHP: 7	📦 DB=mysql; MW=REL1_31; SESAME=2.8.7; PHPUNIT=6.5.*	🕒 7 min 54 sec

Sources: <https://travis-ci.org/SemanticMediaWiki/SemanticMediaWiki/builds/281859845>

### Integration Testing

September 2019 –  
SMW 3.1.0

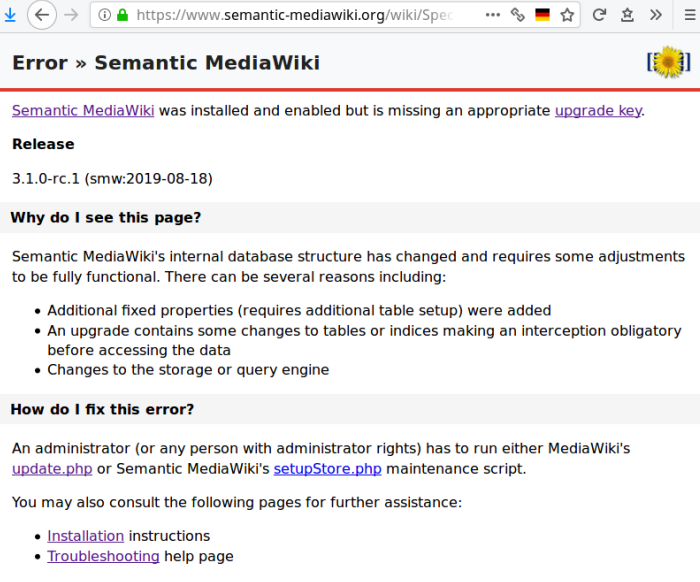


# Semantic MediaWiki

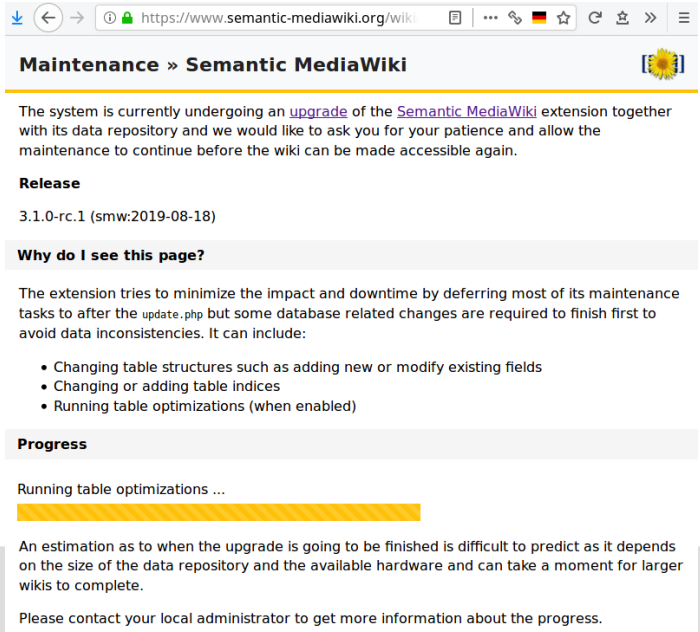
## Semantic MediaWiki 3.1.0

### New features and enhancements:

- Brings upgrade status screens [ #3738, #4026 ]
  - Error screen (no schema update)
  - Maintenance screen (schema update)
- Adds new maintenance scripts (last resort maintenance)
  - purge entity cache [ #3905 ]
  - update query dependencies [ #4137 ]
- Adds new script options to maintenance script “rebuildElasticIndex.php”:
  - -only-update [ #4158 ],
  - -auto-recovery [ #3922 ] and
  - -with-maintenance-log [ #3922 ]



The screenshot shows the 'Error » Semantic MediaWiki' page. It states that Semantic MediaWiki was installed and enabled but is missing an appropriate [upgrade key](#). The release is 3.1.0-rc.1 (smw:2019-08-18). Under 'Why do I see this page?', it explains that the internal database structure has changed and requires adjustments. It lists three reasons: additional fixed properties, an upgrade containing changes to tables or indices, and changes to the storage or query engine. Under 'How do I fix this error?', it instructs administrators to run `update.php` or `setupStore.php`. It also provides links to [Installation](#) and [Troubleshooting](#) help pages.



The screenshot shows the 'Maintenance » Semantic MediaWiki' page. It states that the system is currently undergoing an [upgrade](#) of the [Semantic MediaWiki](#) extension together with its data repository and asks for patience. The release is 3.1.0-rc.1 (smw:2019-08-18). Under 'Why do I see this page?', it explains that the extension tries to minimize impact by deferring maintenance tasks. It lists three tasks: changing table structures, changing or adding table indices, and running table optimizations. Under 'Progress', it shows a progress bar for 'Running table optimizations ...' and states that an estimation of when the upgrade will be finished is difficult to predict. It concludes by asking users to contact their local administrator for more information.

# Semantic MediaWiki

## Semantic MediaWiki 3.1.0

### New features and enhancements:

- Adds new script options to maintenance script “rebuildData.php”:
  - -auto-recovery<sup>[#3922]</sup> and
  - -namespace<sup>[#3960]</sup>
- Outdated query links are now removed by maintenance script “rebuildData.php”<sup>[#3642]</sup>
- Embedded query updates feature refactored and improved <sup>[#3644, #3831]</sup>
- Semantic statistics extended and enhanced<sup>[#3686]</sup>

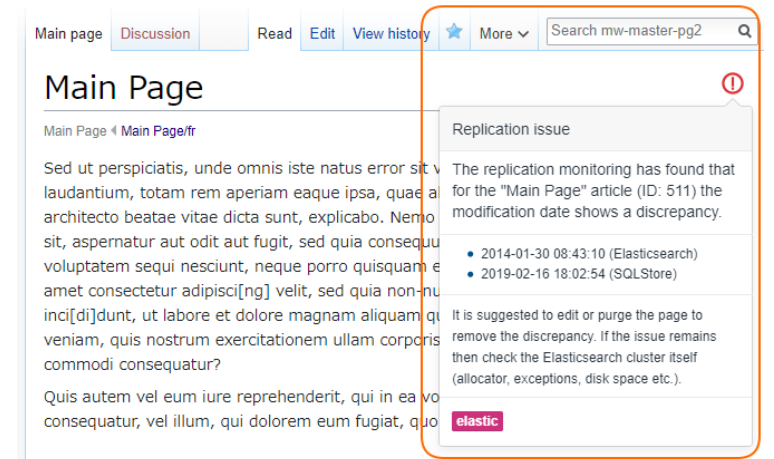
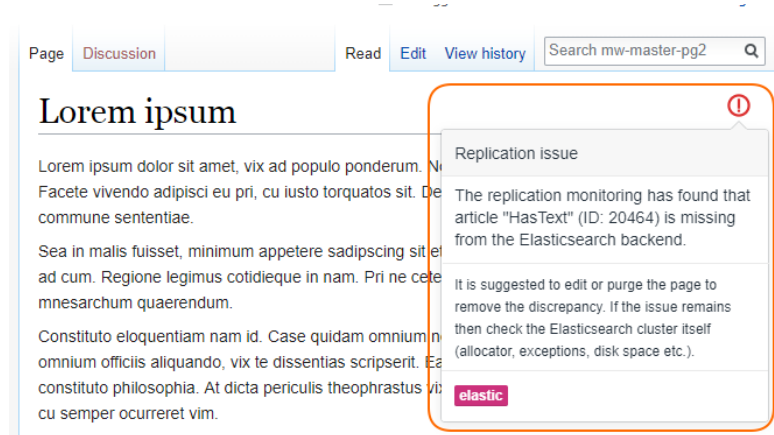
Semantic statistics	
Property values (total)	303,236
- Property values (improper annotations)	588
Properties (total) <sup>i</sup>	784
- Properties (used with at least one value)	644
- Properties (registered with a page) <sup>i</sup>	650
- Properties (assigned to a datatype)	362
Entities (total) <sup>i</sup>	34,096
- Outdated entities <sup>i</sup>	0
- Subobjects	3,456
- Concepts	25
- Queries (embedded, total)	12,930
- plainlist format	5,882
- table format	2,157
- count format	1,975
- debug format	8
Datatypes	18



# Semantic MediaWiki

## Semantic MediaWiki 3.1.0

- Brings replication monitoring for “SMWElasticStore” backend [#3697, #3700, #3713]
  - Check for missing entities
  - Check for outdated entities
  - Status indicator with balloon tip
- Adds replication status information to special page “SemanticMediaWiki” [#4023]
- Adds new maintenance script “rebuildElasticMissingDocuments.php” for rebuilding missing entities [#4114]
- Adds new script options to maintenance script “removeDuplicateEntities.php”:
  - -report-runtime[#4151] and
  - -with-maintenance-log[#4151]
- Allows usage of CirrusSearch at the same time [#3940]



### Replication status

- Last active replication: 2019-09-23 16:16:03
- Replication monitoring (active): ✓
- Recovery job backlog: 0 (estimation)
- Injest (file) job backlog: 0 (estimation)
- Refresh interval: 1s

# Semantic MediaWiki

## Semantic MediaWiki 3.1.0

- Adds support for improved views to result format “table” and “broad-table” [#4114]  
`|class=smwtable-clean`
- Adds support for new separators to result format “table” and “broadtable” [#3793]  
`|sep=ul`  
or  
`|sep=ol`
- Adds support for a new display formatter [#3650]  
`|?HasImage#noimage`
- Result format “templatefile” harmonized with other result formats [#4282]

City	Population	Size
Berlin	3,520,061	891.85 km <sup>2</sup>
Munich	1,353,186	310.43 km <sup>2</sup>
Cologne	1,080,394	405.02 km <sup>2</sup>
Frankfurt	679,664	248.31 km <sup>2</sup>
Stuttgart	606,588	207.36 km <sup>2</sup>
Würzburg	126,635	87.63 km <sup>2</sup>

	Has page	Has text
Test:F0202/1	<ul style="list-style-type: none"><li>• Foo</li><li>• 42</li></ul>	<ul style="list-style-type: none"><li>• 1001</li><li>• bar</li></ul>

Show 10 entries

Search:  Export

	Has page	Has text
Test:F0202/1	<ul style="list-style-type: none"><li>• Foo</li><li>• 42</li></ul>	<ul style="list-style-type: none"><li>• 1001</li><li>• bar</li></ul>

Showing 1 to 1 of 1 entries

Previous 1 Next

	Has page	Has text
Test:F0202/1	<ol style="list-style-type: none"><li>1. Foo</li><li>2. 42</li></ol>	<ol style="list-style-type: none"><li>1. bar</li><li>2. 1001</li></ol>

Show 10 entries

Search:  Export

	Has page	Has text
Test:F0202/1	<ol style="list-style-type: none"><li>1. Foo</li><li>2. 42</li></ol>	<ol style="list-style-type: none"><li>1. bar</li><li>2. 1001</li></ol>

Showing 1 to 1 of 1 entries

Previous 1 Next

# Semantic MediaWiki

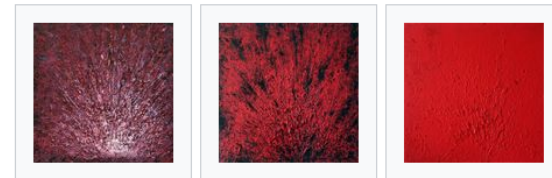
## Semantic MediaWiki 3.1.0

- Adds special page “Missing redirect annotations” [#3720]
- Adds support for attachment links [#3643]
  - In factbox with extra tab [#3652, #3661]
  - Info about local storage [#4147]
- Displays “further results” to inline queries on remote sources [#4143]
- Allows to disable automatic linking of properties [#4042]  
[[MyProperty::@@@|#]]
- Allows to hide in-text annotations for data values containing a wiki link [#3674]  
[[Has text::[[Main Page]]| ]]

3640

Semantic MediaWiki issue ▶ 3640

Refs: <https://github.com/SemanticMediaWiki/SemanticMediaWiki/issues/3640>



Kategorie: Issue

Fakten

Dateien

... weitere Daten zur Seite „Issue/3640“

RDF-Feed ↗

	MIME-Typ	Zuletzt geändert	Is local
<a href="#">25010906 133776770640296 68720735161417728 n.jpg</a> + ↗	image/jpeg	9. November 2018, 14:48:16	✓
<a href="#">25013424 137399203590415 4871714496852262912 n.jpg</a> + ↗	image/jpeg	9. November 2018, 14:49:25	✓
<a href="#">25019162 752705858246774 6850323677200777216 n.jpg</a> + ↗	image/jpeg	9. November 2018, 14:49:40	✓

# Semantic MediaWiki

## Semantic MediaWiki 3.1.0

- Adds support for constraint schemas <sup>[#3746]</sup>
  - Annotated to a property page with `[[Constraint schema::Constraint:User namespace]]`
  - Created with a profile schema of type `PROPERTY_CONSTRAINT_SCHEMA` in the “smw/schema” namespace
  - Available schema types
    - `allowed_namespace` <sup>[#3746]</sup>
    - `unique_value_constraint` <sup>[#3908]</sup>
    - `non_negative_integer` <sup>[#3970]</sup>
    - `must_exists` <sup>[#3981]</sup>
    - `single_value_constraint` <sup>[#4010]</sup>
    - `shape_constraint` <sup>[#4069]</sup>
    - `custom_constraint` <sup>[#3969]</sup>

smw/schema:Constraint:User namespace ?

Résumé Schéma Utilisation 1

```
{
  type: "PROPERTY_CONSTRAINT_SCHEMA",
  constraints: {
    allowed_namespaces: [
      "NS_USER"
    ]
  },
  tags: [
    "property constraint",
    "user"
  ]
}
```

▼ Schema properties

Schema definition	<pre>{   "type": "PROPERTY_CONSTRAINT_SCHEMA",   "constraints": {     "allowed_namespaces": [       "NS_USER"     ]   },   "tags": [     "property constraint",     "user"   ] }</pre>
Schema tag	property constraint + et user +
Schema type	PROPERTY_CONSTRAINT_SCHEMA +

Schema properties ▼

Attribut:Username + Constraint schema

smw/schema:Constraint:User namespace Démarrer

# Semantic MediaWiki

## Semantic MediaWiki 3.1.0

- Adds special property “Processing error type” [#3792]
- Adds special page “Constraint error list” [#4047]
- Adds support for sequence maps to enforce [#4226]
  - Annotated to a property page with `[[Profile schema::Profile:Sequence]]`
  - Created with a profile schema of type `PROPERTY_PROFILE_SCHEMA` in the “smw/schema” namespace
- Adds schema type `PROPERTY_GROUP_SCHEMA` [#3749]

### smw/schema:Profile:Sequence

Summary Schema Usage 1

```
{
  type: "PROPERTY_PROFILE_SCHEMA",
  - profile: {
    sequence_map: true
  },
  - tags: [
    "property profile"
  ]
}
```

### Browse wiki

[RDF](#) [Help](#)

#### TestAllValuesFrom

[Hide groups](#) | [Hide incoming properties](#)

**Has improper value for** TestAllValuesFrom + [ⓘ](#)

**Processing error message** Property "TestAllValuesFrom" contains an "all\_values\_from" constraint.

- It requires that all assigned values are members of listed categories.
- "Test1" is not a member of "Thing, Extra".

**Processing error type** constraint + [🔍](#)

TestAllValuesFrom + [ⓘ](#) **Processing error**

TestAllValuesFrom#\_ERRe731fc0cf533fe76e6996770efe9444b

Go

Many more features and changes

- Release notes at <https://bit.ly/smw-310>

# Semantic MediaWiki

How can you contribute?

# Semantic MediaWiki

## How can you contribute?

- Where are many ways to contribute
  - Create a quality feature requests ( → click here)
  - File quality bug reports on issues you encounter ( → click here)
  - Contribute code with tests, tests and tests ( → click here)
  - Become part of the testers group and test ( → click here)



### → Where are many ways to contribute (cont.)

- Add or enhance documentation ( → [click here](#))
- Add or enhance translations ( → [click here](#))
- Answer questions and participate in discussions ( → [click here](#))
- Organize events ( → [click here](#))

# Semantic MediaWiki

Thank you!

Karsten Hoffmeyer

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